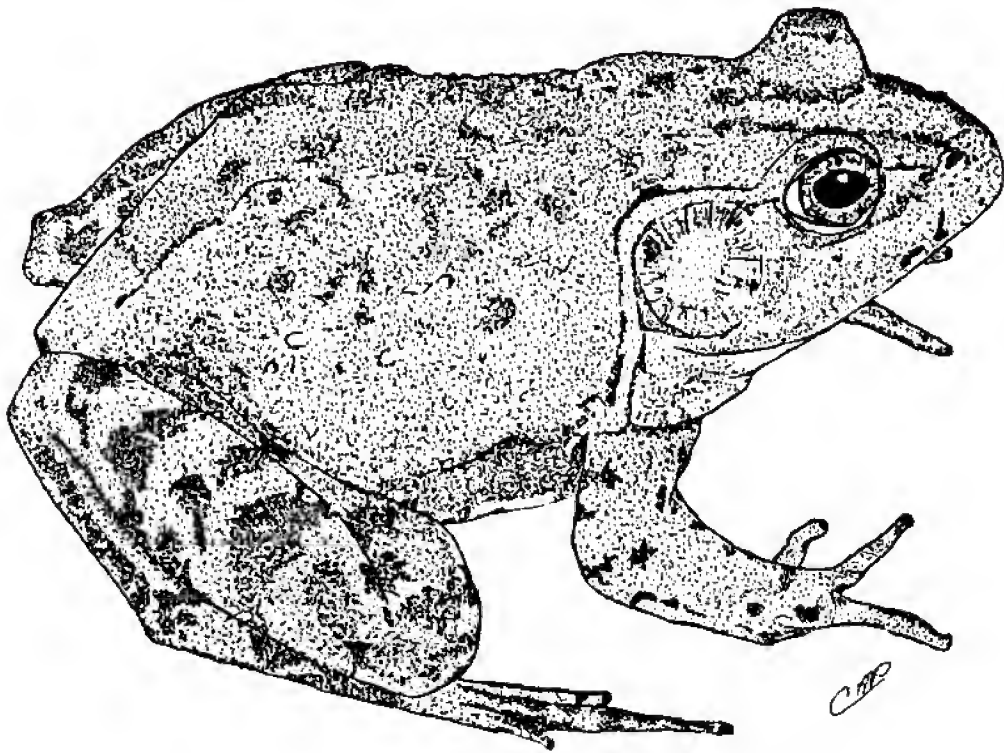


# CATESBEIANA



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## BULLETIN INFORMATION

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(Editorial policy continued on inside back cover)

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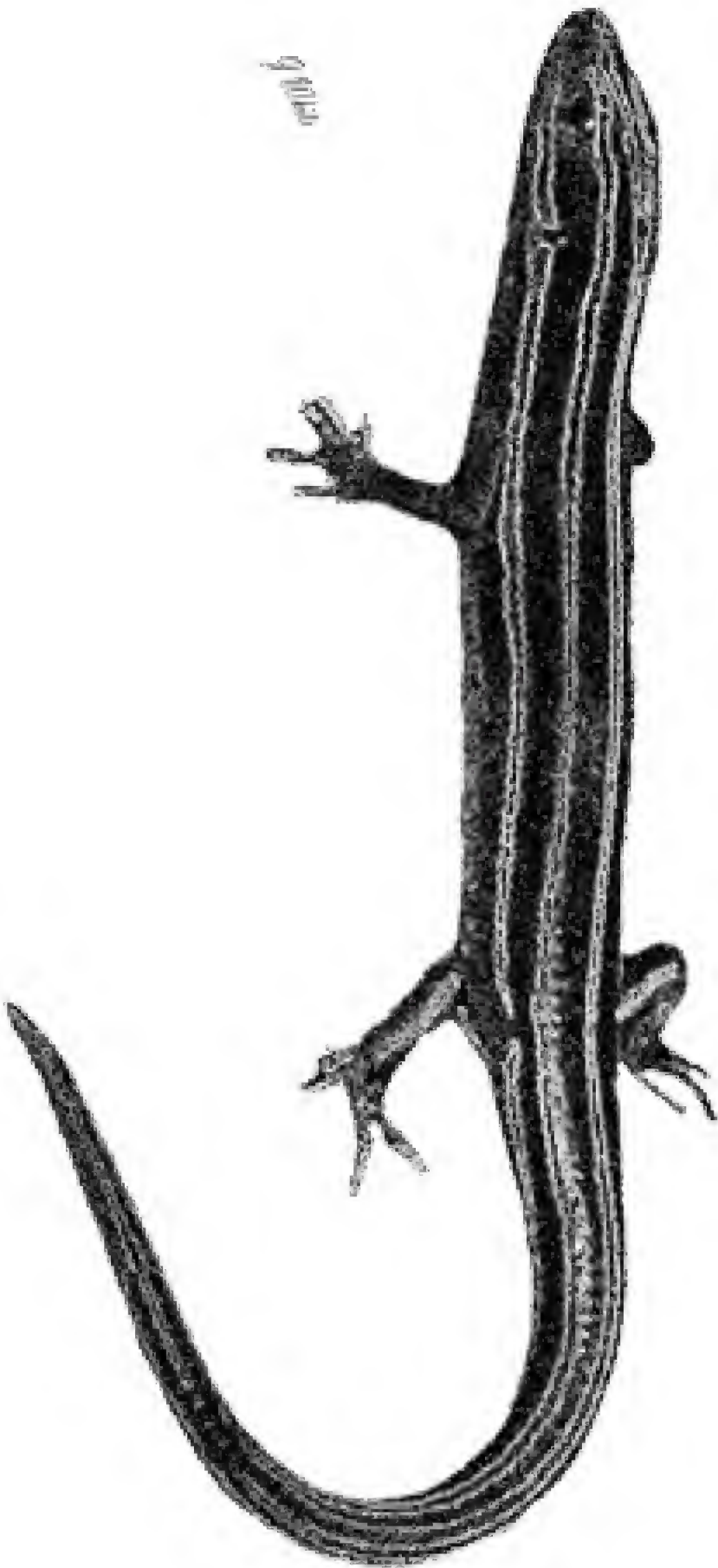
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See Page 102 for details





## **Survey of Havens Wildlife Management Area and Surrounding Areas**

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### **Introduction**

The Havens Wildlife Management Area occupies 2,910 hectares of land on Fort Lewis Mountain in the Appalachian highlands of Southwestern Virginia. In Roanoke County it borders the City of Salem. Fort Lewis Mountain is a long ridge bounded by State Route 311 to the East, and State Route 622 to the North. Route 622 wraps around the far western end of the mountain, which lies in Montgomery County. Both Interstate 81 and the city of Salem lie 2.4 kilometers south of the mountain. The wildlife management area consists predominantly of rough, steeply inclined, and inaccessible habitat 99 percent covered by forest. Fort Lewis Mountain primarily hosts a mixed mesophytic forest consisting of *Quercus*, *Pinus*, and *Carya*. The protected area of the WMA descends from an elevation of 975 meters at its highest peak, to 457 meters at its lowest point. There are also largely untouched forested areas surrounding the Havens that are not protected as wildlife management areas by the Department of Game and Inland Fisheries, nor by any other organization. The habitat of these unprotected areas is similar to habitat in the Havens WMA. The only water sources on the mountain are small, seasonal streams and a few small ponds installed on the top of the mountain by the Virginia Department of Game and Inland Fisheries. The Department originally purchased roughly 2400 hectares (6,000 acres) of land at \$2.61 an acre for the Havens in 1930. At that time the Havens was the only management area owned by the Virginia Department of Game and Inland Fisheries.

The Hanging Rock Battlefield Trail is a 2.75 km paved trail that runs along Mason Creek at the eastern base of Fort Lewis Mountain. The Trail is not a part of the Havens WMA, but was surveyed because of

its close proximity to the WMA. At the Northern trailhead there is an unpaved spur trail that meanders through a less developed area. The trails were installed by the Department of Game and Inland Fisheries in 1999 and sit at an elevation of 340 meters at the northern most point. The lowland area surrounding the trails and creek is dominated by a mixed mesophytic forest similar to that found in the Havens WMA. Green Ridge rises about 40 meters above Mason Creek and the forest consists primarily of *Pinus*. The dirt, spur trail leads to a section of the creek that runs into a low-lying area that has been damned by beavers, creating a swampy area with many dead trees floating and standing in the water.

## **Study Sites**

### **Study Site #1**

Site #1 is a section of Mason Creek in the Havens Wildlife Management Area on the northern base of Fort Lewis Mountain. This section of the creek runs along the bottom of the mountain flowing east. Because of the creek's position against the base of the mountain, it receives less sun in comparison to the section of creek in Study Site #2. The reduced exposure to light creates a cooler microclimate than Study Site #2, and consequently herp species that are more tolerant of cooler weather were observed at this site. The forest surrounding this section of creek is mostly dominated by *Pinus*. The creek bed is wide and rocky, and the creek banks for the most part are also rocky, with the occasional small, sandy bank. Running parallel with the creek on its northern side is State Route 622, which marks the edge of the Havens WMA.

### **Study Site #2**

Site #2 is another section of Mason Creek outside of the Havens WMA, southeast of Fort Lewis Mountain. A small part of this section of creek runs against the northern end of Green Ridge, which shades the creek for most of the day. Along this small part of the creek *Pinus* dominates the forest and there is little undergrowth. Further downstream the creek turns around the edge of Green Ridge, where it

## Havens Survey

receives more sunlight daily. The creek then splits into two sections. The left fork of the creek splits into dozens of small streams that run through the forest and then come back together in a wide depression in the land. In this lowland area beaver activity has caused the creek to back up and form a wide, shallow swamp. This wetland is bordered by a low ridge to the east and flat woodlands to the north and west. Along the southern end of the wetland runs Interstate 81. The runoff from the wetland briefly runs west parallel to I-81 until it hits the right fork of Mason Creek. The right fork of the creek runs straight south, reunites with the runoff from the wetland, and continues south. The section of creek below I-81 was not surveyed. The forest surrounding the lower section of creek not sheltered by Green Ridge is dominated by a mix of *Pinus*, *Quercus*, and *Carya*.

### Study Site #3

Site #3 is on the southeastern end on Fort Lewis Mountain in the Havens Wildlife Management Area. The key feature of this site is an open area in the forest where an old, abandoned trailer is sited, presumably a structure once used by the Department of Game and Inland Fisheries. This open area is on a southern facing slope at an elevation of 700 meters. The building sits against the forest south of the open area, which is flat and then turns into a steep and rocky slope up to more forest. In the flat open area were large boards and other debris that provided cover for herps, scattered around the trailer. Because of this area's high exposure to sunlight during the day, and the shelter provided by the trailer and debris surrounding it, this area was a hotspot for reptiles. In particular this area fostered species that were rarely found or not found at all in other areas, such as *Crotalus horridus horridus*.

### Methods and Materials:

From March through October of 2010 and 2011 opportunistic searches for reptiles and amphibians were utilized as a means for collecting data. Searches were conducted by one to five people who spread out and walked over the area being surveyed at the time, often stopping to flip rocks and logs, or check rock crevices. All areas of the mountain

were surveyed, including small streams, fields, and woodlands, at all elevations. Areas surrounding the Angeline hunter access trail on the northern side of the mountain were surveyed more thoroughly than most other areas. Other habitats that were more heavily studied include the land west of the Carroll access road on the mountain's southern side, and portions of land in the far northeast region of the Wildlife Management Area on the southern side of the mountain. When animals were encountered they were captured if possible, then photographed and released back into the wild. Nets were often utilized for capturing amphibians. Salamanders were also regularly kept in plastic bags after capture in order to take photographs and identify the species. Snake hooks were frequently used for the capture of venomous snakes, while all other herps were hand caught. Most herps were found through targeted searches where specific habitats and sites were being surveyed; however, many reptiles and amphibians were observed by chance encounters.

### **Annotated Checklist**

#### **Amphibians**

##### **Anurans**

1. *Anaxyrus americanus* (American Toad): Twenty-five + specimens. American Toads were abundant in both terrestrial and semi-aquatic areas all over the mountain. American Toads were, in most cases, found on the forest floor, and in one case under a piece of carpet. American toads were also abundant in close proximity to Mason creek near Hanging Rock. During the spring, egg masses and breeding toads were found in small pools of water in a swampy area near the main creek.

2. *Lithobates clamitans melanota* (Northern Green Frog): Seventeen specimens.

Green Frogs were observed in a small, seasonal stream on the southern side of the mountain. Green Frogs were only encountered at elevations below 610 meters, sometimes found resting on the bank of the stream and often under rocks in the streams. Northern Green



## Havens Survey

Frogs were common in both Mason Creek on the northern side of Fort Lewis Mountain and at Hanging Rock, as well as in the swampy area just east of the main creek at Hanging Rock.

3. *Lithobates catesbeianus* (American Bullfrog): Seven specimens. American Bullfrogs were prevalent in small, seasonal streams on the northern side of the mountain. American Bullfrogs occurred only at elevations below 610 meters, sometimes encountered under rocks in the stream and sometimes on the stream bank. American Bullfrogs were also found both in Mason Creek and in the swampy area at Hanging Rock

4. *Lithobates palustris* (Pickerel Frog): Five specimens. Pickerel frogs were found in a small, seasonal stream on the southern side of the mountain. Pickerel frogs were only present at elevations below 610 meters, found resting under rocks in the stream. Pickerel Frogs were found only along Mason Creek at Hanging Rock and in small streams running into the lowland swamp off of the main creek.

## Salamanders

5. *Desmognathus monticola* (Seal Salamander): Ninety specimens. Seal Salamanders were very common throughout small streams at all elevations of the mountain. Seal Salamanders were only found under rocks or in rock crevices in the streams. Seal Salamanders were also observed with frequency under stones in and on the bank of Mason Creek At Hanging Rock and along the north side of Fort Lewis Mountain.

6. *Desmognathus fuscus* (Northern Dusky Salamander): Five specimens. Dusky Salamanders were found in multiple small streams under rocks and in rock crevices.

7. *Eurycea cirrigera* (Southern Two-lined Salamander): Seventeen specimens. Two-Lined Salamanders were present in both small streams under rocks and under debris on the banks of small streams all over the

mountain. Southern Two-lined Salamanders were found under stones along the edge of Mason Creek at Hanging Rock.

8. *Plethodon cylindraceus* (White-Spotted Slimy Salamander): Two specimens.

Two Slimy Salamanders were found under flat pieces of cement at the base of the mountain on the northern side of the mountain.

9. *Gyrinophilus porphyriticus porphyriticus* (Northern Spring Salamander): One specimen.

One Northern Spring Salamander was found under a rock in a dry section of a small stream on the northern side of the mountain at an elevation of 650 meters.

10. *Notophthalmus viridescens viridescens* (Red-spotted Newt): Seven specimens.

Red-spotted Newts emerged in abundance all over the mountain following rainfall. The Newts were found roaming the forest floor. All of the Red-spotted Newts were in the eft stage.

## **Reptiles**

### **Lizards**

10. *Plestiodon fasciatus* (Common Five-lined Skink): Fifteen specimens.

Several Five-lined skinks were observed on the trunks of trees (*Quercus*) on the southeast side of the mountain. Skinks were also common near Mason Creek at Hanging Rock in forested areas dominated by *Pinus* and were often found on fallen or standing trees basking in the sun. This represents a new record for Roanoke County. A digital photograph was deposited in the VHS Archive (#226) as a voucher.

11. *Sceloporus undulates* (Eastern Fence lizard): Nineteen specimens.

Fence lizards were commonly found under boards and on tree trunks throughout all terrestrial habitats on the mountain. Eastern Fence

## Havens Survey

Lizards were also abundant in all areas surrounding the Hanging Rock Battlefield Trail.

### Turtles

12. *Terrapene carolina carolina* (Eastern Box Turtles): Three specimens.

Eastern Box Turtles were observed all over the mountain in terrestrial areas traveling over the forest floor.

13. *Chrysemys picta picta* (Eastern Painted Turtle): One specimen. One Painted Turtle was found basking on a log in the swampy area of Mason Creek at Hanging Rock.

14. *Sternotherus odoratus* (Eastern Musk Turtle): Two specimens. Musk Turtles were found walking along the bottom of Mason Creek in several places in the creek just down stream of Electric Road bridge.

### Snakes

15. *Agkistrodon contortrix mokasen* (Northern Copperhead): Four specimens.

Multiple Copperheads were encountered around an abandoned forestry building, lying beneath boards and in rock crevices. One Copperhead was found under a board in a stand of *Equisetum hyemale*. The board was along the bank of one of the small side creeks that runs off Mason Creek at Hanging Rock.

16. *Crotalus horridus horridus* (Timber Rattlesnake): Three specimens.

Rattlesnakes were found at elevations above 690 meters in oak dominated forests on the southern side of the mountain. Rattlesnakes were mostly encountered at the abandoned forestry building resting under boards or at the base of rocks. However, some individuals were found in an open, rocky outcropping at another location on the southern side of the mountain.

17. *Diadophis punctatus edwardsii* (Northern Ring-Necked Snake): Twenty-five specimens.

Ring-Necked Snakes were abundant near small streams and beneath shale fragments on ridges at varying elevations on the northern side of the mountain. One Ring-Necked Snake was found under a rock along the point of high elevation on Green Ridge near Hanging Rock.

18. *Opheodrys aestivus* (Rough Greensnake): Two specimens.

One Rough Greensnake was observed on a steep, wooded ridge of the northern side of the mountain. The snake was found slithering across a path on the ground. One other Rough Greensnake was found crossing a path about 10 meters from Mason Creek at Hanging Rock.

19. *Pantherophis alleghaniensis* (Eastern Ratsnake): Five specimens.

One Eastern Ratsnake was encountered in a mixed pine and oak forest on a steep north ridge of the mountain. One juvenile Eastern Ratsnake was found slithering along the spur trail about 15 meters from Mason Creek at Hanging Rock. One individual was found crossing Electric Road at Hanging Rock and two others were found dead on Electric Road.

20. *Pantherophis guttatus* (Red Cornsnake): Two specimens.

One Red Cornsnake was found dead on Route 311 just across the creek from the North trail-head of the Hanging Rock Battlefield Trail. The dead snake was on the side of the road closest to Mason Creek, about 10 meters from the creek. A second Cornsnake was found under a board exposed to the sun on the southern side of Fort Lewis Mountain. The elevation of the location where the snake was found is 698 meters. The forest surrounding the open area where the snake was found is mainly composed of *Pinus* with some *Quercus*.

21. *Coluber constrictor constrictor* (Northern Black Racer): Two specimens.

Black Racers were found in open areas slithering amongst the leaf litter, several hundred meters from Mason Creek at Hanging Rock.

22. *Nerodia sipedon sipedon* (Common Watersnake): Fifteen specimens.

Watersnakes were found in Mason creek at Hanging Rock, in the small



## Havens Survey

creeks that run into the lowland swamp, and in the swamp itself. The majority of the watersnakes were observed basking on rocks and logs along the main creek.

23. *Regina septemvittata* (Queensnake): Ten specimens.

Many Queensnakes were observed basking on logs and branches overhanging Mason Creek at Hanging Rock and in the small creeks that run into the swampy area. Many of the Queensakes were found basking in tree branches several meters above the creek.

24. *Thamnophis sirtalis sirtalis* (Eastern Gartersnake): Two specimens. Gartersnakes were found slithering along the forest floor in areas near Mason Creek at Hanging Rock as well as at higher elevations along Green Ridge.

25. *Thamnophis sauritus sauritus* (Common Ribbonsnake): One specimen.

One Ribbonsnake measuring 60.5 cm total length was found slithering along the bank of Mason Creek at Hanging Rock. The section of bank where the snake was found was exposed to sun and was covered mostly by stones with isolated patches of grass. This specimen represents a new record for Roanoke County. A digital photograph was deposited in the VHS Archive (#227) as a voucher.

## Discussion

A total of 10 different species of amphibians were found in the Havens WMA, while six species of amphibians were found in the areas surrounding the Hanging Rock Battlefield Trail. Eight reptile species were encountered in the Havens WMA and 14 species of reptiles were found around the Hanging Rock Battlefield Trail. A total of 10 different species of amphibians were found from both surveyed locations, and 16 total species of reptiles were found at the two locations.

The higher diversity of species in the areas surrounding the Battlefield Trail is most likely due to the variety of different habitats in the area and accessible water sources. The area hosts a large stream,

smaller streams, a swamp, elevated pine forest and lowland mixed mesophytic forest. Mainly the accessibility of water in numerous places is the source of such diversity of species around the Battlefield Trail. The majority of the reptiles found around the Battlefield Trail were in close proximity to some source of water, as were most of the amphibians.

Species of snakes known to be present in Roanoke County, but not observed in the Havens WMA are *Carphophis amoenus amoenus* (Eastern Wormsnake), *Heterodon platirhinos* (Eastern hog-nosed Snake), *Lampropeltis calligaster rhombomaculata* (Mole Kingsnake), *Lampropeltis getula getula* (Eastern Kingsnake), and *Storeria occipitomaculata occipitomaculata* (Northern Red-bellied Snake). The Kingsnakes were likely not found because the surveyed areas are on the edge of the Kingsnakes' natural range, and they were therefore likely not present in the Havens or along the Battlefield Trail. The other species of snakes may have been present but not found simply because of their secretive nature.

Frog species that were not observed in the Havens WMA or the surrounding areas but are common in Roanoke County include *Pseudacris crucifer* (Spring Peeper) and *Hyla versicolor* (Gray Treefrog). These frogs were likely present in the surveyed areas but never encountered. Also, I had several unconfirmed sightings of *Anaxyrus fowleri* (Fowler's Toad) in the Havens WMA, where photographic evidence was not detailed enough to distinguish between *Anaxyrus fowleri* and *Anaxyrus americanus* (American Toad).

There are many species of salamanders that are known to be, or are likely found in Roanoke County, that were not observed in the Havens WMA or the surrounding areas including *Ambystoma jeffersonianum* (Jefferson Salamander), *Ambystoma maculatum* (Spotted Salamander), *Desmognathus orestes* (Blue Ridge (Dusky Salamander), *Hemidactylium scutatum* (Four-toed Salamander), *Plethodon cinereus* (Eastern Red-backed Salamander), *Plethodon glutinosus* (Northern Slimy Salamander), *Plethodon wehrlei* (Wehrle's Salamander), and *Pseudotriton ruber ruber* (Northern Red Salamander). Many of these species could possibly be present in the

## Havens Survey

Havens or the surrounding areas but were not found because of their reclusiveness. Other species such as *Ambystoma jeffersonianum* live in isolated populations in other counties near Roanoke County and are more than likely not present in the Havens or the surrounding areas because the populations are so scattered. Some species like *Desmognathus orestes*, for example, are likely not present in the surveyed areas because they occupy similar niches as *Desmognathus fuscus* (Northern Dusky Salamander) and *Desmognathus monticola* (Seal Salamander), species that are common in the Havens and around the Battlefield Trail. Despite *D. Orestes* being slightly more terrestrial than *D. fuscus* and *D. monticola* there may be enough overlap in their specific niches that *D. orestes* was outcompeted by the other species. The inaccessibility of the Havens also inhibited thorough searches of the habitat at high elevations because hiking to these places was difficult and time consuming. Some of these salamander species and other herps may not have been found because they inhabit such inaccessible areas. Further, none of the surveys in this study were conducted with more than five people but had there been surveys consisting of 20 people or more, most likely there would have been more species found. If thorough surveys were to be continued many of the species previously mentioned might be encountered.

Lizards that are present in Roanoke County but not observed in the Havens WMA or the surrounding areas are *Aspidoscelis sexlineata sexlineata* (Eastern Six-lined Racerunner), *Plestiodon inexpectatus* (Southeastern Five-lined Skink), and *Plestiodon laticeps* (Broad-headed Skink). The Havens WMA and the surrounding areas are on the edge of the natural distribution of all these species of lizards, so they were likely not found because they were not present in the surveyed areas.

*Chelydra serpentina serpentina* (Eastern Snapping Turtle) was the only turtle species indigenous to Roanoke Co. that was not found. Eastern Snapping Turtles were likely present around the Hanging Rock Battlefield Trail, and possibly present in the Havens, and they would have likely been found had hoop traps been used in the survey.



Fortunately for the wildlife in the Havens Wildlife Management Area, the inaccessibility of the mountain keeps the area mostly untouched by humans. Other than hunters and the occasional hiker, the Havens WMA experiences little impact from humans, therefore, the habitat in the Havens WMA is pristine and unspoiled. One potential threat to the Havens may be development, though this should not seriously endanger the populations of reptiles and amphibians as long as the Havens continues to have a protected status throughout all 2,910 hectares of land. The area surrounding the Hanging Rock Battlefield Trail, on the other hand, is much more exposed to human influence and is far less isolated than the Havens WMA. The protected area surrounding the Battlefield Trail and the spur trail is bordered by busy roads on all sides. To the north and east lies Electric Road and to the south runs Interstate 81. These two roads are extremely busy day and night, and Kessler Mill Road, which lies on the west side of the surveyed area, receives a steady flow of traffic as well. These busy roads pose a threat to herps that try to cross them. A couple of Eastern Ratsnakes and a Red Cornsnake were found dead on roads surrounding the surveyed area. This is a very difficult problem to deal with but there are measures that can be taken to lessen the impact of roads on the populations of reptiles and amphibians in this area. Fencing could be installed along the roads, preventing herps from crossing roads. This measure would likely be most effective along Kessler Mill Road where Mason Creek runs directly next to the road. Multiple Queen snakes and Common Water snakes were observed in close proximity to the road where it is closest to the creek, thus some sort of fence would help keep herps off of the road whether they are seeking to bask or trying to cross. One other threat to herps is the excessive amount of trash in and around Mason Creek. There is a large convenience store and a gas station right next to Mason Creek on the north side of the surveyed area. There is a large amount of trash directly behind the gas station on the banks of the creek, and a lot of the trash downstream is likely from these businesses or their customers. This trash is damaging to the environment in general and can be harmful to reptiles and amphibians. Snakes and other herps can get tangled in all sorts of trash such as mesh wiring or landscaping mesh and end up starving because they cannot eat. Thus, it would be very beneficial to the wildlife in this area if periodic trash clean ups



## Havens Survey

were organized for the Battlefield Trail and the Mason Creek area. In addition, signage should be posted along the creek and the Battlefield Trail, especially around the businesses, warning against littering.

In the mid 1970's, several wildlife ponds were installed by the Department of Game and Inland Fisheries along the fire road that runs across the top of Fort Lewis Mountain. Originally the purpose of these wildlife ponds was to provide a source of water for animals on the top of the mountain. During the survey of the Havens WMA one of these water holes was closely monitored for signs of amphibians. The pond was found to be devoid of life and no herps were found in the area. Presumably, the lack of herptofauna around that pool was because there was no shelter for animals in the area. Over the years it appears that these ponds have become filled in by leaf litter so that they are no longer ponds but mud holes. There is only about an inch of water in the hole on top of a thick, deep layer of muck. For the ponds to really be usable by herps the managers of the Wildlife Management Area could dig the ponds back out. Deeper water is essential for most amphibians to use the ponds for refuge and reproduction. In addition, there is no grass on the banks of the ponds, nor any shrubs or other plant life for shelter surrounding the water holes. The lack of any undergrowth on the forest floor surrounding the pond is likely due to the fact that the forest canopy blocks all light from reaching the ground. If the areas surrounding the ponds were to be opened up by clearing out some of the nearby trees it would allow for more growth around the ponds. If the areas around the ponds were cleared and some shrubs and water plants were put in around and in the ponds then more reptiles and amphibians could be attracted to them. The installation of these ponds was a good idea, but their utility for amphibians and reptiles could be increased by making them more "natural" and resembling vernal ponds.

## Acknowledgements

The Virginia Department of Game and Inland Fisheries was very accommodating during the study. I was granted a key to the Carroll Access point on the southern side of the mountain. This enabled me to drive up the mountain a good ways, which reduced the distance I had

to hike and gave more time to spend actually looking for herps. There were several people that gave invaluable advice on the protocol for my research. Firstly, Dr. Richard Hoffman and Bill Hunley, my former science teacher, provided advice on how to approach my research. Jason Gibson was extremely supportive of my study and without his guidance I could not have completed my survey. Mr. Gibson's recommendations and advice on the manuscript format helped me develop a credible paper.

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# **A Survey of the Amphibians and Reptiles of Dyke Marsh Wildlife Preserve in Alexandria, VA**

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## **Introduction**

Dyke Marsh Wildlife Preserve (DMP) is located about 10 km south of Reagan National Airport along the Potomac River in Alexandria VA and is managed by the U.S. National Park Service (NPS). The preserve is 196 ha (484 acres) and consists of three main habitats: tidal freshwater marsh, floodplain, and swamp forest. The preserve is bordered to the east by the tidal Potomac River and to the west by a major four-lane commuter highway: the George Washington Memorial Parkway. The preserve is also surrounded by a heavily used bike trail, picnic area, and marina.

Past human influences on DMP included the diking of the marsh in the early 1800's, farming, and commercial dredging and dumping in the 1960's (Friends of Dyke Marsh brochure). Current negative human impacts on the preserve include boat wakes eroding the marsh, illegal poaching of turtles (pers comm Ned Stone), pollution from urban run-off, and the introduction of exotic plants and animals, including Chinese soft-shell turtles *Pelodiscus sinensis* (Abugattas, 2012).

## **Study Sites**

Site names were created by the author. GPS coordinates were selected from the midpoint of each site.

Site 1- Former House Site (38.778037,-77.050327)

This area is located in on the floodplain sandwiched between a picnic area to the north, the marina to the east, a parking lot to the west and

an access road to the south. A feral cat colony lives here along with a tangle of vegetation including poison ivy *Toxicodendron radicans*, multiflora rose *Rosa multiflora*, and a variety of exotic vines.

Site 2- Haul Road East Side (38.771245,-77.049447)

Beaches and freshwater tidal marshland are the main characteristics of this site. Tangles of exotic vines and tidal detritus piles were also abundant.

Site 3 – Haul Road West Side (38.770175,-77.051464)

Floodplain and swamp forest are the primary habitats in this site.

Site 4- Pipeline Bay/Swamp Forest Area (38.758212,-77.047666)

Tidal freshwater marsh, swamp forest, and floodplain are all represented in this site.

Site 5 – Kayak Trip (38.768518,-77.047709)

Open tidal river, freshwater tidal marsh, and swamp forests were all explored by kayak in this area.

## **Materials and Methods**

The survey took place on Thursday 3 May 2012. The morning of the survey started with overcast skies and cool temperatures around 15 °C, however, as the day progressed, the skies cleared and the temperature rose to a high of 27 °C. The pressure was 76.4794 centimeters. The dew point was 14 °C. Winds were light at about 11.5 kph. It was 2 days before a “super” moon. (National Weather Service website) The day was divided into three parts: a 3 hour terrestrial survey in the morning; a 3 hour water survey by canoe/kayak in the afternoon and a 1 hour frog call survey after sunset.

Approximately 45 volunteers participated: 30 in the morning; 10 in the afternoon; and 10 in the evening. The survey volunteers included VHS members, NPS biologists, Fairfax County Park Authority and Northern Virginia Regional Park Authority naturalists and biologists,



## Dyke Marsh Survey

U.S. Fish and Wildlife Service biologists, Master Naturalists, Friends of Dyke Marsh (FODM) members and local residents who were interested in the wildlife found in their neighborhood.

For the morning terrestrial survey, the group was divided into four teams of approximately 8 people. Each team was assigned a different terrestrial site to survey. Surveying consisted of: visual search, turning cover objects, and listening for calling frogs. The afternoon kayak survey consisted of a visual search and listening for calling frogs. The night time frog call survey consisted of listening for calling frogs and visual searching with flashlights along Haul Road in the middle of Sites 2 and 3.

### Results

A total of 15 species were found during the survey. This included one amphibian (an anuran), and fourteen reptile species. The reptiles included one lizard, six snake species and seven species of turtles.

### Amphibians

#### Frogs

1. *Lithobates clamitans melanota* (Northern Green Frog) - Four Green Frogs were seen and/or heard calling in the marsh area near Pipeline Bay in Site 4. One Green Frog was heard calling in the marsh under a bridge along Haul Road and three more were heard calling in the marsh in Site 2.

### Reptiles

#### Lizards

1. *Plestidon fasciatus* (Common Five-Lined Skink) - One dead Five-lined was found on a bike path with a squished tail in Site 4. Three skinks were seen basking on logs on the beach along Haul Road in Site 2; and two skinks were seen in the wetlands of Site 3.

## **Snakes**

1. *Carphophis amoenus amoenus* (Eastern Wormsnake) -  
One Wormsnake was found at Site 4.
2. *Nerodia sipedon sipedon* (Common Watersnake) -  
By far the most commonly seen snake in our survey. This species was seen at all five sites: four at Site 1; six at Site 2; seven at Site 3; two at Site 4, and five on the kayak trip in Site 5. They were all found on the move terrestrially and aquatically or basking in the open.
3. *Opheodrys aestivus* (Rough Greensnake)  
One Rough Greensnake was seen on the move in vegetation in Site 3. The snake was not photographed as it disappeared too quickly for the spotter to capture.
4. *Pantherophis alleghaniensis* (Eastern Ratsnake)  
One rat snake was seen crawling in a small tree between the marsh and the path in Site 2 and one was seen crawling in the open in Site 1.
5. *Storeria dekayi dekayi* (Northern Brownsnake)  
One Brownsnake was found under driftwood on the edge of the beach in Site 2 and one dead Brownsnake was found at the parking lot of Site 4.
6. *Thamnophis sirtalis sirtalis* (Eastern Gartersnake)  
One Eastern Gartersnake was found basking in the open in Site 2 on our pre-survey scouting trip on 22 March 2012.

## **Turtles**

1. *Chelydra serpentine serpentine* (Eastern Snapping Turtle)  
One hatchling snapper was found crossing the path at Site 2. Two adults were seen in the water at Site 4.

## Dyke Marsh Survey

**2.**      *Chrysemys picta picta* (Eastern Painted Turtle)

One Eastern Painted Turtle was sighted and confirmed by the crew at Site 4. More Painted Turtles were likely seen, especially on the kayak trip in Site 5, however confirming the ID of the basking turtles on the kayak trip was extremely difficult for this survey leader.

**3.**      *Pseudemys rubiventris* (Northern Red-bellied Cooter)

At least two Red-bellied Cooters were seen during the survey, confirmed by the crew at Site 4. Many more large, basking turtles were sighted during the kayak trip, but their identity could not be confirmed.

**4.**      *Sternotherus oderatus* (Eastern Musk Turtle)

One Musk Turtle was found crawling through a very shallow stream area in the swampy marsh area of Site 4.

**5.**      *Terrapene carolina carolina* (Eastern Box Turtle)

Two Eastern Box Turtles were found, both at Site 1.

**6.**      *Trachemys scripta elegans* (Red-eared Slider)

Two Red-eared Sliders were seen basking in Site 4; one Red-eared Slider was identified by John White via a picture sent to him post-survey of one of the turtles seen in Site 5. More Red-ears were most likely seen but not identified.

**7.**      *Trachemys scripta scripta* (Yellow-bellied Slider)

One Yellow-bellied Slider was identified in the marsh at Site 4. More were probably seen during the kayak trip into Site 5.

## Discussion

All 15 species found on this survey were expected in this area. No species represented new county (Mitchell and Reay, 1999) or park records (pers comm Brent Steury).

It is difficult to ID basking turtles covered in mud and algae in an area where there are four species with similar sizes and markings. To get a better understanding of the species of Dyke Marsh Wildlife Preserve, turtle traps should be used so that close inspection and positive identification of the animals could be made.

The most remarkable aspect of this survey was the dearth of amphibians. Thirteen species of frogs are known or expected in Fairfax County VA (Mitchell and Reay 1999). In an area seemingly perfectly suited for frogs, only ONE species was found: *Lithobates clamitans melanota*. Forty five people spent morning, afternoon, and night in a large marsh without seeing or hearing any amphibians except for 7 Green Frogs.

I believe more nighttime amphibian surveys should be conducted at Dyke Marsh Wildlife Preserve to verify if this survey underrepresented the amphibian population or if the Dyke Marsh Wildlife Preserve is unusually deficient in frogs compared to other sites in the area (personal observation).

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National Weather Service 3 Day History Reagan National Airport. 4 May 2012. Retrieved 4 May 2012 from National Weather Service website <http://w1.weather.gov/data/obhistory/KDCA.html>

### **Acknowledgements**

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**Richard L. Hoffman (1927-2012)**

Joseph C. Mitchell and Steven M. Roble



Figure 1. Richard L. Hoffman (ca. 2009). Photo by Rick Dawson.

Virginia recently lost one of its most valuable human resources. Richard Lawrence Hoffman (age 84) died on June 10, 2012, from complications following open heart surgery. His breadth of knowledge and contributions to science on animals ranging from millipeds to insects to worms to amphibians and reptiles, especially in Virginia, will never be matched. He was one of the last old-time naturalists. Many details of his life are reviewed in the biographies by Roble

## Richard L. Hoffman (1927-2012)

(2009) and Mitchell (2009) from which some of the information here is derived.

Richard Hoffman (Figure 1) was born on September 25, 1927, in Clifton Forge and spent his youth exploring the countryside where he developed a strong love of natural history. He almost finished his undergraduate degree in biology in 1950 at the University of Virginia but was unable to complete a freshman math class. He was accepted to graduate school at Cornell University in 1951 where his major professor and the dean accepted his 29 publications as being equivalent to passing the math course (Roble 2009). He completed his Master's degree in Entomology in 1959 but worked at the Radford Arsenal as a chemist when he was not at Cornell or in the field.

Richard obtained his Ph.D. in Zoology in 1960 from Virginia Tech where he wrote his dissertation on the taxonomy of branchiobdellid worms (crayfish commensals). In the same year, he accepted a teaching position at Radford University where he taught numerous biology courses over a 28 year period. He joined the Virginia Museum of Natural History as Curator of Recent Invertebrates in 1989 and held this position until his retirement in 2009. Richard retired only from state service but still came in every day to work on various projects and publications. He is survived by a brother, Hank Hoffman; a daughter, Marian Evans; two sons, Lawrence Hoffman and Carl Hoffman; and grandchildren, Brittany Evans, Brett Evans, Rachel Hoffman, Mary Hoffman, and Ella Hoffman; and a nephew, Robert Hoffman.

Without question, Richard Hoffman was the most knowledgeable person on the natural history of Virginia and the southern Appalachians. His original interest in natural history in his teen years was on herpetology. His scientific contributions began in 1944 at the age of 16 with the publication of several papers on amphibians and reptiles of the Clifton Forge area (Hoffman 1944a, b), as well as 13 nature columns on herps in the local newspaper (Roble and Mitchell 2009). He initially wanted to pursue a career in herpetology but was discouraged by some prominent herpetologists at the time. During his undergraduate years at the University of Virginia, he realized that there was plenty of room for taxonomic contributions on the inver-

tebrates, especially millipeds, present under the same rocks and logs as the herps he found. And although Richard published more than four hundred papers on invertebrates around the world, he never lost his love of the amphibians and reptiles, especially salamanders, of Virginia.

Richard Hoffman published 73 papers on various aspects of the conservation, distribution, and natural history of amphibians and reptiles, almost all of which were based on observations in Virginia (Mitchell 2009). He recognized the two distinctive calls of the gray treefrog complex (*Hyla chrysoscelis* and *H. versicolor*) and outlined their distribution pattern in Virginia two decades before they were recognized as separate species (Hoffman 1946; Johnson 1966). He was the first to note the expansion of the range of *H. chrysoscelis* westward onto the Blue Ridge escarpment in Floyd County (Hoffman 1996). He described two subspecies that were later considered invalid (Six-lined Racerunner [*Aspidoscelis sexlineata*], Seal Salamander [*Desmognathus monticola*]) (Hoffman 1951, 1957a, b). Most of his herpetological contributions were distribution records. He published herp checklists of Alleghany County (Hoffman 1945a), Fort Pickett (Hoffman 1953), Burkes Garden in Tazewell County (Hoffman and Kleinpeter 1948a, Hoffman 1955, 1983), and Mount Rogers (Hoffman and Kleinpeter 1948b). He later summarized all of his observations on the herps of Alleghany County in a four-part series published in *Catesbeiana* (Hoffman 1985a, b, 1986, 1987a). He wrote valuable contributions to natural history conservation in Virginia (Hoffman 1987c) and a much cited review of the geology and natural history of Virginia (Woodward and Hoffman 1991), both of which provided information on amphibians and reptiles. He addressed the amphibian decline problem with a historical review of his observations on amphibians in the Clifton Forge area in an article in *Catesbeiana* (Hoffman 1992b). His final herpetological contribution (Hoffman 2012b) concerns biogeographical issues in Virginia, including a challenge to other herpetologists to document new state records.

Numerous species, as well as several families and genera, of invertebrates bear his name. Also, one salamander was named in his honor – the Valley and Ridge Salamander (*Plethodon hoffmani*) – by



## Richard L. Hoffman (1927-2012)

Richard Highton (1971). Hoffman had collected the type specimen near his home town of Clifton Forge in 1944. Highton (2009) described how the description of the Peaks of Otter Salamander (*Plethodon hubrichti*) that he and Richard were about to publish was underhandedly thwarted by Gordon Thurow (1957). He also discovered the first records of the Coal Skink in Virginia (*Plestiodon anthracinus*, Hoffman 1944a). It was his first paper.

The Virginia Herpetological Society (VHS) was founded in 1958, a year or so before Richard became a member (Mitchell 2009). He maintained his membership in most years until his death. Many of his herpetological contributions were published in the VHS newsletter and the society's journal, *Catesbeiana*, all of which are listed below. The change from an irregularly published newsletter edited by Frank Tobey from 1958 to 1979 (Tobey 1988) to a journal format occurred at a meeting in Longwood College (now University) in 1980. Richard Hoffman suggested the title *Catesbeiana*, honoring Mark Catesby (a 17<sup>th</sup> century naturalist), for the new journal; it was accepted by unanimous vote of the members present (Figure 2).

Richard also helped JCM create a new journal called *Banisteria*, named after the first university trained naturalist to work in Virginia, John Banister (1650-1692), which focuses on the natural history of the Commonwealth. The first issue was published 300 years after Banister's death (1992). The Virginia Natural History Society was formed about two years later. Numerous papers by Hoffman (usually as sole author) and coauthors, mostly concerning invertebrates, were published in this journal during the next two decades. One was on anuran distribution records in Greensville County (Hoffman and Mitchell 1996) and another on milliped predation on salamander eggs (Mitchell et al. 2009). A symposium was held in honor of Richard Hoffman's 80<sup>th</sup> birthday in September 2007 at the Virginia Museum of Natural History and resulted in a beautiful edited book that contains 32 papers by 41 authors on four continents (Roble and Mitchell 2009). Richard Hoffman was the true southern gentleman scientist. He was a generous and caring individual who loved Virginia and its natural wealth. He was well known for his zeal to educate anyone who cared to listen. He was an eloquent speaker. Some of his presentations were

compiled the day before or on the spot. Among his many teaching and scientific research awards, are the Virginia Lifetime Achievement Award from the Virginia Museum of Natural History, the Edward H. Abbuehl Award for Environmental Education from the Friends of the Blue Ridge Parkway, and the Lifetime Achievement Award from the VHS. He will be long remembered for his education of many students and colleagues, his scientific contributions to state, regional, and global biodiversity, his love and knowledge of Virginia, his generosity, and his quiet, unassuming but passionate approach to life. JCM last saw Richard in July 2011 when he visited him in Martinsville. Richard was excited to show JCM an insect that he had found in a swimming pool when he took a break from the heat one day (see Hoffman 2012a). It was easy to tell that he had plans for many publications, some of which had been in the works for years. Unfortunately, some of these will never be finished. We have lost one of the most important pillars in Virginia's natural history. Much of the advancement of herpetology in the Commonwealth will be based on the foundations he provided.

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Figure 2. Attendees of the 1980 meeting of the Virginia Herpetological Society in Farmville, Virginia. Left to right: Chris Pague, Richard Hoffman, Bob Bader, Wendy Mitchell (now Robertson) with Joshua, Charlie Hooper, Joe Mitchell, unknown, and Don Merkle. Bader, Hoffman, and Hooper are deceased.



## Field Notes

***Carphophis amoenus amoenus* (Eastern Wormsnake)** VA: Fairfax County, Ellanor C. Lawrence Park, 5040 Walney Rd., Chantilly, VA 20151 (38 51.7°N,-77 26.0°W). 22 April 2012. Michael Gregory and Mark Khosravi.

Coloration: On 22 April 2012 at 1143 h an albino eastern wormsnake (*Carphophis a. amoenus*) was discovered in mixed cedar and hardwoods section along the Walney tract area of Ellanor C. Lawrence Park. The specimen was found alongside a typically colored wormsnake under the same cover board. Classic albinism was exhibited including red/pink eyes and a lack of any pigmentation except for a light yellowish coloration around the edges of the dorsal scales.

Albinism in *Carphophis amoenus amoenus* has been previously reported in Arlington County, VA (Allard, H. A. 1945. A color variant of the eastern worm snake. *Copeia* 1945:42) and in James City County, VA (Somma, Matthew. 2012. Field Notes – Coloration, *Catesbeiana* 32(1):36).

Photographs were deposited with the VHS Digital Archive (#213) as a voucher. The animal was released after photos were taken.

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***Carphophis amoenus* (Eastern Worm Snake) VA:** Warren County, Shenandoah River State Park, Horse Concession Parking Lot (Elevation 752ft., N38 50.850' W078 18.362'). 28 August 2011. Jennifer Saik.

County Record: On 28 August 2011 at approximately 1100h, two rangers, James Funk and Erick Kohn, discovered an Eastern Worm Snake under a cloth that was laying under a pile of wood, at the park's horse concession parking lot. This observation is a new county record and fills a hiatus in the distribution of this species in Virginia (Mitchell J.C. and K.K. Reay. 1999. Atlas of Amphibians and Reptiles in Virginia. Special Publication No. 1, Virginia Department of Game and Inland Fisheries, Richmond, VA. 122 pp.) being found in virtually every county surrounding Warren. Photographs of the snake were taken and submitted to the VHS Digital Archive (#221).

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***Hyla gratiosa* (Barking Treefrog).** VA: Prince George County, Disputanta, 15261 Noldes Road. (N 37.23970, W 77.13578). 30 June 2012. J. Ryan Niccoli.

County Record: Previous range records for the Barking Treefrog span across the south eastern portion of the coastal plains of Virginia from Nottoway County east to Mathews and Isle of Wight Counties, but a hiatus exists in the current range maps of this species (Kleopfer, J. D. and C. S. Hobson. 2011. A Guide to the Frogs and Toads of Virginia. Bureau of Wildlife Resources Special Publication Number 3, Virginia Department of Game & Inland Fisheries. Richmond. Virginia.; Martof, B. S., W. M. Palmer, J. R. Bailey, and J. R. Harrison III. 1980,

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On 30 June 2012, a juvenile Barking Treefrog (approximately 0.6 cm SVL) was found at a residence in Prince George County. The frog was among leaves of a domestic *Hosta* plant less than 0.3 m above ground level along the front of the house. Temperature at the time of capture (1745h) was approximately 30°C. The frog exhibited a standard solid green color phase with some typical dark ring coloration appearing as the frog darkened, and had a high degree of yellow spotting. A potential breeding site for barking tree frogs was located less than a kilometer from the capture site across SR 614. The pond is approximately 0.5 hectare and partially bordered by forest. The remainder has been maintained as part of a residential lawn. In addition, during subsequent night surveys, Barking Treefrogs were heard at many locations near the house. Further survey methods would have included trespassing on private property, thus no other visual confirmations were taken. As a new record for Prince George County, this capture bridges a range hiatus between Surry and Chesterfield counties. A digital photo was deposited in the VHS Archive (#237) as a voucher.

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Virginia Department of Game and Inland Fisheries  
3801 John Tyler Memorial Hwy  
Charles City, VA 23030

***Plestiodon laticeps* (Broad-headed Skink)** VA: Loudoun Co. , Leisure World of Virginia, Lansdowne, VA 20176 (39° 4' 52.15" N, 77° 28' 13.03" W). 8 July 2012. Ian Richardson.

County Record: On 08 July 2012, at approximately 0830h, I observed a Broad-headed skink while walking along a footpath. The Broad-headed skink was observed and photographed on a rock immediately beside the footpath on the eastern edge of the property.

This species has not been reported in Loudoun County in Mitchell and Reay (1999. Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, VA, 122 pp.), or the Virginia Department of Game and Inland Fisheries wildlife database. A Digital image was deposited in the VHS archives (# 229) as a voucher.

Ian Richardson, Amateur Photographer  
19355 Cypress Ridge Terrace Unit 1109  
Lansdowne, VA 20176

***Hyla chrysoscelis* (Cope's Gray Treefrog)** VA: Augusta County, 108 Canton Lane, Stuarts Draft, VA. (38.0'303°N, -78.59.173 °W.) 29 April, 2012. Brenda Tekin

County Record: On the night of 29 April 2012 at approximately 2215 hours a *Hyla chrysoscelis* was recorded calling from the vicinity of our small backyard pond. The weather was fair, calm winds, the sky conditions clear, the air temperature was 13°C, the dewpoint 50.

This recording represents the first documented case of *Hyla chrysoscelis* in Augusta County and a significant range extension in Virginia. A digital recording was deposited with the VHS Digital Archive (#214) as a voucher.

Brenda Tekin  
108 Canton Lane  
Stuarts Draft, VA 24477



## Field Notes

**Eastern Spiny Softshell (*Apalone spinifera spinifera*)** VA: Wise Co., 5545 Browning LN Wise, VA 24293, (+36.968268 -82.533503 ). 07 May 2012. Caleb Ramsey.

County Record: On 07 May 2012, at approximately 1321h, an adult Eastern Spiny Softshell was discovered while going for a walk at work. The turtle was found just off the end of the Bear Creek Reservoir Dam.

This is the first observation of *Apalone spinifera spinifera* reported for Wise County (Mitchell J.C. and K.K. Reay 1999. Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, VA, 122 pp.; Tobey F.J. 1985. Virginia's Amphibians and Reptiles: A Distributional Survey. Virginia Herpetological Society, Purcellville, VA. 114 pp.; and the Virginia Department of Game and Inland Fisheries wildlife database).

This new county record is the product of a public outreach initiative by the VHS to provide identification of amphibians and reptiles to the public. Photographs are sent by the observer to the VHS, and identification is made, with the submitted photograph(s) deposited in the VHS archive as a voucher (Archive #215).

Caleb Ramsey  
P.O. Box 751  
Wise, VA 24293

***Hyla squirella* (Squirrel Treefrog).** VA: Sussex Co., State Route 724 (36-889597N, 77-143815W). 12 June 2012. Brian Munford.

County Record: On 12 June 2012, at approximately 2400h after conducting NAAMP survey work, a small Squirrel Treefrog chorus was noted and recorded. This observation is a new county record and fills a hiatus in the distribution of this species in Virginia (Mitchell J.C. and K.K. Reay, 1999. Atlas of Amphibians and Reptiles in Virginia, Special Publication No. 1, Virginia Department of Game and Inland

Fisheries, Richmond, VA. 122 pp.) their being found in the counties to the north, east and south of Sussex. A digital recording of the chorus has been deposited in the VHS archive (#222).

Brian Munford  
4021 Northrop Street  
Richmond, VA 23225

***Lampropeltis getula getula* (Eastern Kingsnake)** VA: Halifax County, near the intersection of Hankins Loop Road and Highway 659 (36°40'58.95"N, 78°59'45.42"W) 19 April 2012 and 10 May 2010.  
Matt Gray

County Record: *Lampropeltis getula getula* is a rare species of snake to find in the piedmont of Virginia. Gibson and Merkle (2004, Road mortality of snakes in central Virginia. *Banisteria* 24: 8-14.) reported finding only 1 Eastern Kingsnake road killed out of 109 total DOR snakes found during a study in Powhatan County. Clifford (1976, Relative abundance and seasonal activity of snakes in Amelia County, Virginia. *Virginia Herpetological Society Bulletin* 79: 4-6.) in a road kill study of snakes in Amelia County found 6 snakes out of a total of 278. Additionally, JG has been hunting for snakes in Pittsylvania County for the past 12 years and has only found 2 kingsnakes. On 19 April 2012 MG found an Eastern Kingsnake in the flood plain of the Dan River, close to a marshy habitat. The general area consists of early succession growth with a border of mixed pines. The day was sunny and the temperature was 21°C. The snake measured around 101 cm in total length. Mitchell (1994, *The Reptiles of Virginia*. Smithsonian Institution Press, Washington DC. 353pp.) and Mitchell and Reay (1999, *Atlas of Amphibians and Reptiles in Virginia*. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.) do not report Eastern Kingsnakes for Halifax County. A photo voucher has been deposited in the Virginia Herpetological Society's photo archives (digital photo #232).

An earlier observation of this species occurred on 10 May 2010. MG found a DOR kingsnake on Hwy 501 near its intersection with Hwy

58 in the Town of South Boston. It too was located near an early succession habitat and near the Dan River floodplain. This record was not reported due to the lack of a photo voucher.

Matt Gray  
6007 Cobblestone Ct.  
Danville, Va. 24540

Jason D. Gibson  
Galileo Magnet High School  
230 South Ridge Street  
Danville, VA. 24541

***Lampropeltis triangulatum triangulatum* (Eastern Milksnake) VA:**  
Bland Co., 1117 Suiter Road, ca 1.6 km West of junction with Rt.  
42/52. 27 May 2012. Amy A. Roberts.

County Record: On 27 May 2012, I found an Eastern Milksnake under an overturned water trough in a fence line on my Bland County farm. The snake was about 9 m from a horse barn. This individual was approximately 72 cm long, had a Y-shaped marking on top of the head, smooth scales, and an undivided anal plate. These observations constitute a new county record for this species.

Eastern Milksnakes have never been vouchered in Bland County (Mitchell, J. C. and K. K. Reay 1999. Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, VA. 122 pp.; Tobey, F. 1985. Virginia's Amphibians and Reptiles: A Distributional Survey, Virginia Herpetological Society, Purcellville, VA. 114 pp. ; and the Virginia Department of Game and Inland Fisheries wildlife database). Digital images have been deposited in the VHS archives (Digital voucher #217).

Amy A. Roberts  
1117 Suiter Road  
Bland, VA 24315

***Lampropeltis triangulum triangulum* (Eastern Milksnake).** VA: Dickenson Co., Fremont, VA Hwy 83 at junction VA Hwy 63. 17 July 1993. R. L. Hoffman; Breaks Interstate Park, Garden Hollow Road (off VA Hwy 80) at Russell Fork River, 3 June 2008. S. M. Roble.

County Record: The Eastern Milksnake occurs statewide in Virginia (Tobey. 1985. Virginia's Amphibians and Reptiles: A Distributional Survey. Virginia Herpetological Survey, Purcellville, VA. 114 pp.; Mitchell. 1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington, DC. 352 pp.; Mitchell & Reay. 1999. Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Wildlife Diversity Division, Virginia Department of Game and Inland Fisheries, Richmond, VA. 122 pp.), but none of these authors plotted any records in the Cumberland (Appalachian) Plateau region in the far southwestern corner of the state. The range map in Linzey and Clifford (1981 [1995 printing]. Snakes of Virginia. University Press of Virginia, Charlottesville, VA. 173 pp.) shows a record for Wise County, but their source and precise locality is unknown to us (and the aforementioned authors). Roble and Hobson (1995. Records of amphibians and reptiles from the Clinch Ranger District, Jefferson National Forest. *Catesbeiana* 15: 3-14) subsequently collected a specimen near Coeburn in this county, thus confirming the presence of Eastern Milksnakes in this region.

On 17 July 1993, RLH collected a DOR Eastern Milksnake (VMNH 6645) near the McClure River at Fremont in Dickenson County, which represents a second county of occurrence in the Cumberland Plateau physiographic province of Virginia. SMR subsequently observed this species (no photos taken) on 3 June 2008 on a gravel road 11.0 air miles (17.8 km) to the NNE in the same county near the Kentucky border at Breaks Interstate Park.

Steven M. Roble  
Virginia Department of  
Conservation and Recreation  
Division of Natural Heritage  
217 Governor Street  
Richmond, Virginia 23219

Richard L. Hoffman  
Virginia Museum of Natural History  
Martinsville, Virginia 24112



## Field Notes

***Scaphiopus holbrookii* (Eastern Spadefoot).** VA: Franklin Co., Ferrum, Ferrum College Campus. Forests near Chapman Pond (36° 55' 36" N, 80° 01' 47" W). Elevation 1376' (410 m). 10 July 2012. Todd Fredericksen.

County Record: On 10 July 2012 at 1145 h, an Eastern Spadefoot (*Scaphiopus holbrookii*) was captured in a pitfall trap established to monitor the impacts of silvicultural treatments on wildlife species. The pitfall trap was located approximately 100 m from Chapman Pond, a small (approximately 1 ha) pond on the campus of Ferrum College. This appears to be the first capture of this species in Franklin County.

The forest is composed of mature mixed hardwood species with scattered white pine (*Pinus strobus*). The understory is relatively open with scattered patches of Mountain Laurel (*Kalmia latifolia*) and hardwood tree leaf litter. Weather conditions at the time of capture were overcast, mild (21°C) and humid (relative humidity 75%). Rainfall within the last 24 hours was 1 cm (0.40 in). Snout-vent length was 50 mm. A digital photo was deposited in the VHS Archive (#230) as a Voucher.

Todd Fredericksen  
212 Garber Hall  
Ferrum College  
Ferrum VA 24088

***Tantilla coronata* (Southeastern Crowned Snake).** VA: Campbell Co., along dirt frontage road to Camp Hydaway Road (Co. Rt. 677) approximately 1.5 km north of Co. Rt. 670 (37° 20' 9.27"N 79° 08' 52.71"W). 30 May 2012. Gary Habermas, Mike Fitzgerald and Paul Sattler.

County Record: Camp Hydaway is a church camp located on Candler Mountain in Campbell County. It consists of more than 1200 hectares (3000 acres) of mixed hardwood/pine forests with a small lake and Opossum Creek running through it. It has a rich and diverse herpe-

tofauna from which several previous records for Campbell County have been reported (Sattler, P. 1990. *Storeria o. ocipitomaculata*. Field Note. *Catesbeiana* 10(2):45.; Hayslett, M.S. 1993. *Opheodrys aestivus*, Field Note. *Catesbeiana* 13(1):11.; Sattler, P. 1995. Amphibians and reptiles from Candler Mountain, Campbell County, Virginia. *Catesbeiana* 15(2):35-44.). Environmental classes from Liberty University have been conducting informal surveys on this property for more than 25 years without encountering this species previously.

On 28 May 2012, Gary Habermas, Mike Fitzgerald and Paul Sattler were conducting an informal survey when we uncovered a small (22.5cm TL, 18.5cm SVL) *Tantilla coronata* under a small piece of old carpet along a dirt frontage road to Co. Rt. 677. There were other small pieces of trash and logs in this open area. The weather was warm and sunny in this fairly arid microhabitat.

Southeastern Crowned Snakes have been reported twice from Bedford County (Roble, S.M., G.N. Woodie and M.D. Kinsler. 2007. Discovery of a population of Scarlet Kingsnakes (*Lampropeltis triangulum elapsoides*) in the Virginia Piedmont. *Catesbeiana* 27:84-94.) to the west; once from Pittsylvania County, twice from Halifax County, and once from Henry County to the immediate south; and once from Amherst County to the north of Campbell County. This find is thus not unexpected and fills a gap in south central Virginia which represents the center of abundance for this species in our state. The habitat was typical for that reported for *Tantilla* (Mitchell, J.C. 1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington DC. 352 pp.) being arid and with pines mixed with hardwoods. This species has also been reported from Isle of Wight County to the east, making it likely to occur along the southern border of Virginia between Halifax and Isle of Wight Counties. Photographs have been deposited in the VHS Digital Archive (#218) as a voucher.

Paul Sattler  
Department of Biology and Chemistry  
Liberty University  
1971 University Blvd.  
Lynchburg VA 24502

## Field Notes

***Pseudemys concinna* (River Cooter).** VA: City of Danville, Danville River Walk Trail (36°35'14.37"N, 79°22'56.90"W). 19 September 2010 and 3 September 2012. Jason Gibson

Reproductive Behavior: Two years ago on 19 September 2011, I made an observation of two separate pairs of River Cooters exhibiting what looked like courtship behavior. Smaller males were following larger females. I could see this happening from the vantage point of a high railroad tressle which had been converted into a walking trail over the Dan River in Danville, Virginia. I observed the males following the females for some distance and once they caught up with the females, they would swim over the female. Looking through binoculars allowed me to see that the males had long foreclaws, the males were also significantly smaller in size than the females. The male once on top of the female would brush her head with his long foreclaws. One female, unphased by what was happening grazed on a rock covered with algae and other aquatic vegetation. I tucked this observation away in a field notebook and thought at that time that perhaps this was just a fluke observation. On 3 September 2012, I was walking with my family at the same location and witnessed at 0936 h one pair of River Cooters with a male swimming on top of a female. At 1016 h I saw 3 pairs of turtles exhibiting this same behavior. At that time I did not have a camera to document the behavior so on 9 September I came back to make some photo vouchers. On this day, I found many pairs of River Cooters exhibiting mating behavior. One female had 2 males courting her. One male was on top and stimulating her with his long foreclaws and another was following the female from behind probing her tail region. Spring mating behavior has been reported in Virginia (Gibson, JD. 2001 Amphibians and reptiles of Powhatan County Virginia. *Catesbeiana* 21(1): 3-28) but Mitchell (1994, *The Reptiles of Virginia*. Smithsonian Institution Press, Washington DC. 353pp.) does not report fall mating or courtship. Females have cloacal glands which release pheromones, these trails of pheromones are subsequently followed by adult males (Ernst, CH., JE Lovich, and RW. Barbour. 1994. *Turtles of the United States and Canada*. Smithsonian Institution Press, Washinton DC 578pp). All of the events described above indicate that females were releasing

phermones and therefore males were following and were motivated to swim over the female and stimulate her with the long foreclaws. I did not see copulation but the above described observations suggest that these turtles exhibit fall courting behavior each year. Perhaps copulation in the fall is exceedingly rare but even one copulation event would be a huge benefit for the male's reproductive output. As research on turtles continues to advance, a trend of sperm storage, sperm competition, and multiple paternity seems to be the norm (Tom Akre personal communication). Fall breeding could be more prevalent than has been thought. Digital photos have been deposited in the VHS Archive (# 231).

Jason D. Gibson  
230 South Ridge Street  
Galileo Magnet High School  
Danville, Virginia 24541

***Pseudemys concinna concinna* (Eastern River Cooter). VA:**

Appomattox Co., Holiday Lake 4-H Camp (37°23'26.46"N, 78°38'24.25"W. elev. 467') 18 June 2012. Dennis Woodson.

County Record: On the afternoon of 18 June 2012, an adult female Eastern River Cooter was seen laying eggs on a bank in open sun in front of the dining hall at this 4-H Center house. After laying her eggs, the turtle headed back toward the lake and was last seen entering the woods at the edge of the cleared area. No measurements were taken of the turtle, so estimates of length would need to be made from the pictures taken. The area is mixed hardwood and southern pine. A photo was deposited in the VHS Archive (#223) as a Voucher.

Dennis Woodson  
6770 Musical Lane  
Roanoke, VA 24018



## Field Notes

***Heterodon platirhinos* (Eastern Hog-nosed Snake).** VA: Louisa County, 174 Horseshoe Circle, Gordonsville, Virginia. 7 September 2012. Robin M. John.

County Record: On 7 September 2012 an adult Eastern Hog-nosed Snake was observed crossing Horseshoe Circle Road. The snake was moving swiftly and RJ was not sure if it was venomous or not due to the bright color of the snake. He quickly took a photograph of the snake before it got away. This digital photograph was sent to the VHS for identification. The snake was easily identified as a bright orange patterned hog-nosed snake. This is the first vouchered report for this species for Louisa County according to Mitchell (1994, *The Reptiles of Virginia*. Smithsonian Institution Press, Washington DC. 353pp.) and Mitchell and Reay (1999, *Atlas of Amphibians and Reptiles in Virginia*. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.). This new county record is the product of a public outreach initiative by the VHS to provide identification of amphibians and reptiles to the public. Photograph(s) are sent by the observer to the VHS and identification is made, with the submitted photograph(s) deposited in the VHS Archive as a voucher (Archive # 233).

Jason D. Gibson  
Galileo Magnet High School  
230 South Ridge Street  
Danville, VA. 24541

***Opheodrys aestivus* (Rough Greensnake)** VA: Northumberland County, 1269 Pumpkin Hill Road, Burgess VA 22473 (N37,52,21 W76,22,02) 16 September 2012. Temple Moore.

County Record: On 16 September 2012, at approximately 1130 h, I found a DOR, juvenile Rough Greensnake on our farm road in Northumberland County. The snake had turned from green to blue.

The species has not been reported in Northumberland Co in Mitchell

and Reay (1999, Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.) or Mitchell (1994, The Reptiles of Virginia. Smithsonian Institution Press, Washington DC. 352 pp.). However, as a Wildlife Mapping participant, I have reported this species as early as 2003, but never included a photo. A digital photo of the specimen was submitted to the VHS Archive ( #228).

Temple Moore  
Certified Virginia Master Naturalist  
DGIF Volunteer Corps  
207 N Fairfax Street  
Alexandria VA 22314

***Pleistodon laticeps* (Broad-headed Skink).** VA: Loudoun County., Janelia Farm Research Campus, 0.3km south from Seldon Island (Potomac River). (+39° 4' 12.86", -77° 27' 29.81"). 9 May 2012.  
Larry Mendoza.

County Record: On 9 May 2012, two Broad-headed Skinks (*Pleistodon laticeps*) were found while walking on the service road that leads to Seldon Island on the Potomac River on the HHMI Janelia Farm Research Campus (east side of the property). The lizards were photographed in their natural poses and were not disturbed. According to Mitchell and Reay (1999, Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.) this sighting documents the first report of this lizard in Loudoun County, although it is listed as likely for Loudoun County. This species is also documented or likely to be known in the counties surrounding Loudoun. Digital photos were deposited in the VHS archive (# 234) as a voucher.

Larry Mendoza  
Janelia Farm Research Campus (HHMI)  
19700 Helix Drive  
Ashburn, Va 20147

## Field Notes

***Hemidactylium scutatum* (Four-toed Salamander)** VA: Pulaski County, Cox Hollow Road Jefferson National Forest (N 37° 03' 56.7 W 80° 52' 43.6") 14 May 2012. Paul Sattler.

County Record: On 14 May 2012 a juvenile Four-toed Salamander was found under moss on a log. According to Mitchell and Reay (1999, Atlas of Amphibians and Reptiles in Virginia. Special Publication Number 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.) this species has not yet been recorded for Pulaski County. The Four-toed Salamander is known from Giles County to the north, Floyd to the south, Montgomery to the east and Wythe to the west, therefore, its presence in Pulaski County is not surprising. Digital photos were taken as a voucher and submitted to the VHS Archive (#235).

Paul Sattler  
Department of Biology  
Liberty University  
1971 University Blvd.  
Lynchburg VA 24502

## President's Corner

Greetings, my fellow herp lovers. My first year as president is coming to a close and it has been a very fast and productive year. This past spring and summer have shown themselves to once again be very fruitful in regards to our surveys. I want to personally thank each and every one of you for attending all of our surveys. We had five surveys this year and you guys came out in force for all of them!!!! We have once again found many county records and have successfully contributed data to the status of Virginia's reptile and amphibian fauna. It is important to remember that the Virginia Herpetological Society cannot exist without its member base and support. It is each and every single one of you who make these surveys a success. I want to also take this opportunity to thank our young members. I've had the pleasure of working with some of our younger members this year and it's been quite impressive. The enthusiasm I have seen from this section of our membership reminded me of myself when I was at that age and it brought a big smile to my face. It's good to see young people still interested in herpetology today. Remember, you are the future of herpetology and the future of the VHS. It was also great meeting so many new faces and reconnecting with old friends. I truly encourage everyone to keep coming out to our surveys in the future. To those who could not make it to any of our surveys this year, you have no idea what you're missing (just check out the event summary pages on our website)! I encourage everyone to come out at least once and try your hand at citizen science. Young or less young, women or men, experienced or less experienced, we welcome everyone to come on out and participate in our surveys. It's a tremendous learning opportunity for the whole family! I am a huge proponent of citizen science and it is something that I strive to constantly promote. These surveys, as fun and exciting as they are, also serve a scientific purpose. This is what citizen science is all about, getting the general public involved in data collection, learning something in the process, all the while having a blast doing it! You will see more efforts from the VHS in the next year to pursue citizen science programs; both within and outside of the VHS via collaborations, so stay tuned.

Speaking of VHS involvement, I would like to take this opportunity to thank Joy Ware and Tim Christensen. Both Joy and Tim have



## President's Corner

resigned this year after many years of service to the VHS. This is a true loss for the VHS and I want to thank both of them for being such wonderful and enthusiastic leaders. Joy Ware was the Chair of the Research Committee for many years and her greatest accomplishment has been a long running project called Snake Force 1, where she and a team of helpers conducted long-term herpetofauna health monitoring in 3 major national wildlife refuges. Joy has given many talks at our fall meetings and was a wonderful person who will be missed sincerely. Tim was the Chair of our Conservation Committee. He has worked tirelessly to lead the charge in educating the general population regarding conservation concerns and efforts in Virginia. His talent and knowledge will be missed as well. The retirement of Tim and Joy now leaves two open leadership positions with the VHS. If anyone is interested, please contact me. This is a great opportunity to be part of the leadership team of the VHS and drive the VHS business.

### CURRENT EVENTS

As president of the VHS, I have been asked by the Virginia Department of Game and Inland Fisheries to be part of the Governor's Office mandated review of our exotic and dangerous animal laws in Virginia. This consensus-building panel of 30 stakeholders ranging from zookeepers, private keepers (hobbyists), government officials, humane societies and other non-profits is called the Dangerous Animals Initiative. This panel is charged with reviewing existing legislation, defining the terms and conditions for any new legislation if needed, and to come to a consensus based solution to the laws regulating exotic and dangerous animals in Virginia. A report will be drafted and sent to the Governor's Office as well as to the Virginia General Assembly by early next year. This will serve as a guideline for any new legislation that will be introduced (if any) in the general assembly next legislative session. I will be attending a series of meetings where I will discuss VHS interests in any legislation that deals with reptiles and amphibians in Virginia. This gives VHS a voice in the process of regulating reptiles and amphibians in Virginia. For more information and updates on this you can go visit: <http://virginiaanimals.net/>

Earlier this year, we asked all of you to vote on what you think our official state reptile and amphibian should be. Well, the votes came in and the winners of this contest were the Eastern Ratsnake (*Pantherophis alleghaniensis*) and the Spotted Salamander (*Ambystoma maculatum*). I have sent an email to Senator Dick Black's office on August 21 letting him know of our decision. When I met with Senator Black, earlier this year, he was very interested in sponsoring a bill that would establish an official reptile and/or amphibian. Although past attempts have failed in establishing an official reptile and amphibian, I'm not discouraged in trying again, especially now that we have someone in the State Senate who is willing to fight for the recognition of reptiles and amphibians in Virginia. Let's keep our fingers crossed.

I was featured in the fall edition of the HHMI Bulletin for starting a Nature Club at the HHMI Janelia Farm Research Campus. Specifically I was featured for our herpetological surveys on our private 689 acres on the Potomac River. What's great about this is that it gives the VHS more visibility. The HHMI Bulletin goes out to scientists, educators and interested parties all over the world. This is great exposure and I made sure to plug the VHS. You can view the video and read the article here: [http://www.hhmi.org/bulletin/fall2012/centrifuge/janelia\\_herpetology\\_survey.html](http://www.hhmi.org/bulletin/fall2012/centrifuge/janelia_herpetology_survey.html)

#### SURVEYS FOR NEXT YEAR

We will be discussing locations for next year's surveys at our fall symposium. Keep watching our website for updates.

#### FALL SYMPOSIUM

This year the VHS is doing something a bit different for our fall symposium. On October 20, starting at 8am, we are heading back to the National Zoo in Washington DC. The VHS used to hold regular meetings at the zoo in the 50's and 60's. I would like to revisit this tradition. This is going to be a one of a kind fun and exciting fall symposium. In addition to some very special talks, we will be allowed to have back room access to the Reptile Discovery Center. Right now, the Reptile Discovery Center is launching conservation research initiatives on Virginia's Shenandoah Salamander as well as the Hellbender salamander. This seemed like a great opportunity for

## President's Corner

the VHS to perhaps help and get involved with these initiatives.

We have a wonderful lineup of speakers for you this year.

Keynote speaker:

- Dr. Anthony Leonardo (HHMI Janelia Farm Research Campus Group Leader) Neural basis for the prey capture behavior of amphibians.

Other speakers:

- Paleo Quest's Jason Osborne and Dr. Aaron Alford: Paleo herpetofauna of Virginia.
- Dr. Kimberly Terrell (Smithsonian Institute Fellow): Climate change and hellbender salamander ecology.
- Dr. Eric Dallalio (USGS): Conservation efforts of the Shenandoah Salamander.
- Reptile Discovery Center staff: Conservation efforts of herps across the world.

We will be giving talks in the morning and then after lunch we will be allowed to have private tours of the Reptile Discovery Center at the National Zoo.

Additionally, to sweeten the deal, following Saturday's symposium, you have the opportunity to go and partake in a special citizen science program sponsored by the Association of Zoos and Aquariums called FrogWatch USA on Sunday. Rachel Gauza will be hosting her yearly training session at the National Zoo to coincide with the VHS fall symposium. If you attend this training and become a citizen scientist with FrogWatch USA on Sunday, they will refund your travel expenses. This is a GREAT opportunity for the VHS community to get engaged and help out. You can find out more information at: <http://www.aza.org/frogwatch/>

I hope to see everyone at the fall symposium. It will be worth it. Keep an eye on the VHS website for more information regarding our fall symposium.

If you have any questions or concerns, please don't hesitate to contact me. My email address is: [President@vaherpsociety.com](mailto:President@vaherpsociety.com)

Cheers!

Larry Mendoza

VHS President

### **VHS Fall Meeting and Symposium**

The VHS will hold its Annual Fall Meeting at a special location this year, the National Zoo in Washington, DC! This event will also be special in that all attendees will have the opportunity to get a behind-the-scenes tour of the Reptile Discovery Center. It will give us an opportunity to hear about and network with the exciting research the Smithsonian is involved in regarding Virginia's salamanders. The keynote speaker will be Anthony Leonardo, other speakers include Jason Osborne and Aaron Alford from PaleoQuest. Staff from the Zoo will also present information on the salamander work they are currently doing in Virginia. Please keep checking the VHS website, events section, for further details.

Date: October 20th, 2012

Location: The National Zoo/Smithsonian in Washington, D.C.

Parking: Parking in the Zoo is \$22. If you try to park outside the Zoo make sure you read all signs as towing is strictly enforced.

Host Website: <http://nationalzoo.si.edu/>

Contact: Larry Mendoza at [president@vaherpsociety.com](mailto:president@vaherpsociety.com)

**Please RSVP to Larry, if you are planning to attend!**



**Virginia Herpetological Society  
Minutes of the Spring Meeting  
Shenandoah River State Park  
Bentonville, VA 22610  
May 18, 2012**

The meeting was called to order at 7:50pm by the president, Larry Mendoza, with 21 in attendance. The agenda was provided to all attending. Prior to the business meeting the species list and pictures for the next day's survey were reviewed to a crowd of 30.

The following old business was reviewed: John Orr is now helping with data entry for the herp IDs; the membership list has been removed from *Catesbeiana*; membership cards will remain electronic for now and revisit a paper version another time.

Committee Reports

Newsletter, Susan Watson: Accepting material for the August newsletter, including book reviews. She needs material by early July and will send out an email notification as the time gets closer.

*Catesbeiana*, Paul Sattler: 32(1)- 275 copies were printed at the cost of \$363.69. 250 copies were mailed at the cost of \$331.62. Consider changing the cut-off for expired membership to March 1 to avoid production and postage costs on non-active members.

Past President, Kory Steele: Has a list of objectives which include some of the following: contacting past grant recipients to confirm completion of research and enforce presentation of results as agreed upon; continue with herp IDs, which are up to 5 a day at times; continue work on an email list allowing the ex-com to communicate with one email address that reaches out to all ex-com members, this will help avoid contacting resigned committee chairs and using old email addresses.

Conservation, Tim Christensen: Unable to attend and report not made available due to recent resignation from position. Larry discussed possibilities of a current conservation committee member becoming

chair and increasing the involvement in the community even further.

Research, Joy Ware: Unable to attend, report not made available.

Education, Mike Clifford: Unable to attend, report not made available. Kory Steele did encourage information to be sent to Mike with any educational efforts made on behalf of the VHS.

HerpBlitz, Jason Gibson: Mattaponi WMA in Caroline County is scheduled for June 23 and 24, 2012. This is going to be a nice property to survey. Will be posting survey times on our website soon, but will have those staying overnight contact him via email for campsite information since there will be limited locations and limited spots available. Signs will be created to help direct those attending to the designated survey locations, as this site is not well defined. All prior HerpBlitz surveys have been written for publishing in *Catesbeiana*. He will be presenting at a master naturalists program in September on how to perform a Bioblitz and then provide a mini-Bioblitz to those attending for demonstration.

Cafepress, Patricia Crane: Unable to attend and report not made available.

Treasurer-Secretary, Emily Steele: 267 members, 962 Facebook fans. Current bank account balance \$7674.67. June 1 we will lose 63 members due to expired memberships.

Website, John White: We've had 600,000 more hits than Spring last year. He is working on a new turtle identification guide.

Advisory, Craig Pelke, John Orr, Rachel Goodman, Caroline Seitz: Unable to attend. Larry reports that our newest chair to the committee will be Kelly Geer.

## Minutes of the Spring 2012 Meeting

### New business

1. Larry has met with Senator Black to discuss a Virginia State Reptile. He would like to include our membership in this process of deciding which reptile to propose and will send out an email to the membership explaining how they can vote. He will post a deadline for the end of June, but this will likely make the next legislative session.
2. Fall Meeting location is potentially the National Zoo with the keynote speaker as Anthony Leonardo. Once confirmed, will decide logistics as far as metro passes and parking. Will consider asking Matt Evans, with the National Zoo, as a speaker to discuss the Appalachian salamander, which is a new exhibit at the zoo.
3. Amendments to the constitution currently needed are our current status as a corporation and non-profit organization and cancel memberships prior to June of the expired year. The process of amending according to our constitution was discussed and an email will be sent to the membership prior to the Fall Meeting where the amendments will be voted upon.
4. The idea of creating professional videos representing the Society, conservation, education, and research was presented. May help replace our presence when our executive committee cannot appear in person. Will be revisited further in the year.
5. New material for Cafe Press is needed. Need to increase our product selection, increase options in pictures and artwork, and advertise the store more on Facebook.
6. Consider creating a *Grants in Herpetology* research committee that consists of a broad range of backgrounds such as PhD, naturalists, and a representative of DGIF.
7. Make minutes available not just in journal, but post on the website. John White states there is room available. This will help with transparency to our members and future members.
8. Catesbeiana, pdf vs paper? Paul has created a pdf version for the past 2 years now, though not available on the website. Our online version available to the public lags about 5 years from the current issue sent to members only. Our one major

expense is in the printing and postage of the journal. Do we consider only pdf journals, with an opt-in for paper? Will again, revisit the idea at another time. Will also consider changing the online version available to the public to lag only 1 year.

9. Is it time to change membership categories and fees? Emily presented the idea to change categories from youth, regular, family, and life to student, regular, and life (removing family). Consider increasing student to \$10-12 and regular to \$18-20 and keeping life at the current \$225. Need to define student as just middle and high school or college as well, with no age restriction. The idea of creating a group discount to state park interpreters was presented by David Perry.
10. Create a budget to allocate where money can be spent without prior approval.
11. National Herpetological Society. Larry has participated in conference calls with other Herp Societies to discuss the start up of such a group. This society seems to exist of mostly hobbyists, but he feels it needs to include conservation, education, and research as well. It was decided that at this time the VHS will continue to monitor the activity and stay active in calls, but will not endorse our participation. This will be revisited at the Fall Meeting.
12. We now sponsor vaherps.com with the disclaimer that views expressed on this forum are not representative of our Society. Larry moderates the forum and provides VHS news and trivia along with field herpetology guidelines for forum members.
13. Open discussion presented:

Jason discussed the idea of the VHS attending the upcoming “Annual Virginia Association of Science Teachers Education Professional Development Institute” taking place on November 7-10 in Williamsburg. This would provide an excellent source of awareness of the VHS and an opportunity for us to provide education on herps. All presenters must be registered by September 1, therefore a



## Minutes of the Spring 2012 Meeting

decision must be made prior to the Fall Meeting. Will revisit via email.

Suggestion for a master contact list of professors, prominent herpetologists, state park contacts, and nature centers was discussed. Kory will compile this into one spreadsheet for easy access by all.

Meeting was adjourned at 8:50pm.

Emily Steele  
VHS Treasurer-Secretary



## **Treasurer's Report**

**Balance on hand 01 April 2012**

**\$7,093.96**

### **Receipts**

Donation from Retrieval Syst. Corp., appreciation for Snake ID	\$10.00
New Memberships	\$1,090.00
Membership Renewals	\$483.00
Donation from VA Living Mus	
Participation in Reptile Weekend	\$25.00
VHS Box Turtle T-shirts	\$20.00
Café Press Commission	\$235.00

**Total Receipts**

**\$1,863.45**

### **Disbursements**

PayPal Transaction Fees	\$51.64
Catesbeiana 32(2)	\$695.31
Catesbeiana 32(2) additional Printing	\$41.35
USPS, Stamps	\$25.20
Domain Renewal	\$73.70
Poster Production	\$13.63

**Total Disbursements**

**\$900.83**

**Balance on Hand 27 September 2012**

**\$8,056.58**

Total Society Members	243
Total Facebook Fans	1,259

Submitted by Emily Steele

## Field Notes

The field notes section of *Catesbeiana* provides a means for publishing natural history information on Virginia's amphibians and reptiles that does not lend itself to full-length articles. Observations on geographic distribution, ecology, reproduction, phenology, behavior, and other topics are welcomed. Field Notes will usually concern a single species. The format of the reports is: scientific name (followed by common name in parentheses), state abbreviation (VA), county and location, date(s) of observation, observer(s), data and observations. The name(s) and address(es) of the author(s) should appear one line below the report. Consult the editor if your information does not readily fit this format. All field notes must include a brief statement explaining the significance of the record (e.g., new county record) or observation (e.g., unusual or rarely observed behavior, extremely early or late seasonal record, abnormal coloration, etc.). Submissions that fail to include this information are subject to rejection. Relevant literature should be cited in the body of the text (see Field Notes in this issue for proper format). All submissions will be reviewed by the editor (and one other person if deemed necessary) and revised as needed pending consultation with the author(s).

If the field note contains information on a new county (or state) record, verification is required in the form of a voucher specimen deposited in a permanent museum (e.g., Virginia Museum of Natural History) or a photograph (print, slide, or digital image) or recording (cassette tape or digital recording of anuran calls) deposited in the archives of the Virginia Herpetological Society. Photographs and recordings should be sent to the editor for verification and archiving purposes; the identity of voucher specimens must be confirmed by a museum curator or other qualified person. Include the specimen number if it has been catalogued. Prospective authors of distribution reports should consult Mitchell and Reay (1999. Atlas of Amphibians and Reptiles in Virginia), Mitchell (1994. The Reptiles of Virginia), and Tobey (1985. Virginia's Amphibians and Reptiles: A Distributional Survey) [both atlases are available on-line on the VHS website] as well as other recent literature to determine if they may have a new county record. New distribution records from large cities that formerly constituted counties (Chesapeake, Hampton, Newport News, Suffolk, and Virginia Beach) are acceptable, but records from smaller cities located within the boundaries of an adjoining county will only be published if the species has not been recorded from that county. Species identification for observational records (e.g., behavior) should be verified by a second person whenever possible.

## PHOTOGRAPHS

High contrast photographs (prints, slides, or digital images) of amphibians and reptiles will be considered for publication if they are of good quality and are relevant to an accompanying article or field note. Digital images are preferred. Published photographs will be deposited in the VHS archives.